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10/573,536	03/27/2006	Hee-Kyung Lee	CU-4748 WWP	5461

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EXAMINER
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BENGZON, GREG C

ART UNIT	PAPER NUMBER
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2444

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/573,536	<b>Applicant(s)</b> LEE ET AL.	
	<b>Examiner</b> GREG BENZON	<b>Art Unit</b> 2444	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 32-67 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This application has been examined. Claims 32-67 are pending.

#### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/08/2009 has been entered.

#### ***Priority***

This application claims benefits of priority from Foreign Application 10-2003-0067204 (KOREA) filed September 27, 2003.

The effective date of the claims described in this application is September 27, 2003.

#### ***Response to Arguments***

Applicant's arguments filed 09/08/2009 have been fully considered but they are not persuasive.

The Applicant presents the following argument(s) [*in italics*]:

*...the present invention does not require the request, search, and collect processes as disclosed in Lamkin...*

*Lamkin must receive a "request" for content from a "terminal", then "search" ..., and finally "collect" the plurality of entities and collection metadata before analyzing the condition of the usage environment of the user terminal from the packaged metadata. terminal.*

The Examiner respectfully disagrees with the Applicant. The Examiner notes that Applicant Specification Page 4 Lines 30-35 and Page 8 Lines 20-35 indicate that a request for content is received before analyzing/obtaining content. The claimed invention requires user input and knowledge of the user terminals before analyzing/obtaining the content. The Examiner respectfully requests clarification and the pertinent portions of the Applicant Specification regarding wherein the *present invention does not require the request, search.*

Further while Lamkin disclosed an embodiment wherein Lamkin receives a request for content, Lamkin is not limited to this embodiment.

Lamkin Paragraph 203 searches for content using automated agent and stores the content based on a set of presentation rules or user profiles. (Lamkin-Paragraph 35)

Thus Lamkin is able to collect content without a specific request from a user.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., *targeting content without requiring a request*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The Applicant presents the following argument(s) [*in italics*]:

*Lamkin fails to teach, disclose, or mention the relation metadata for describing temporal/spatial relation of the contents, especially the spatial relation. Contrarily, Lamkin only discloses timeline of the entities (Lamkin [0376]). However, claim 1 of the presently claimed invention uses the package metadata, which includes the relation metadata to consume a variety of contents with the temporal/spatial relation in the user terminal.*

The Examiner respectfully disagrees with the Applicant.

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Benitez disclosed (re. Claims 32) wherein the metadata includes relation metadata for describing temporal/spatial relation of the content. (Benitez-Column 12 Lines 1-25)

### ***Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claim 50 recites *a package metadata having a computer readable medium*.

The Examiner notes the Applicant Specifications do not provide sufficient guidance regarding said package metadata being comprised of computer readable medium, any hardware, machine or physical object.

The term “package metadata” in claim 50 is used by the claim to mean “hardware, machine, or physical object”, while the accepted meaning is “data for describing attributes of other data”. While hardware or storage memory can embody data structures, the opposite is not true. Data structures cannot embody computer readable medium, any hardware, machine or physical object.

The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support

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or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 50-67 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term “package metadata” in claim 50 is used by the claim to mean “hardware, machine, or physical object”, while the accepted meaning is “data for describing attributes of other data”. While hardware or storage memory can embody data structures, the opposite is not true. Data structures cannot embody computer readable medium, any hardware, machine or physical object. The term is indefinite because the specification does not clearly redefine the term.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 32-67 rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility and thus is non-statutory subject matter.

Claims 1-49 are directed towards a system comprising an analyzing unit and providing unit.

Upon inspection of the Applicant Specifications Page 10-12 the Examiner cannot detect any physical or hardware component that embodies the said units. The Examiner is relying on the ordinary meaning of the term 'unit' which may be hardware or software. Thus the Examiner concludes said '*analyzing unit*' and '*providing unit*' may be embodied entirely by software and are non-statutory subject matter.

Claims 50-67 are directed towards '*package metadata*'.

The Examiner notes that in view of the USC 112 issues raised above the Examiner interprets the package metadata as having no hardware embodiment because data structures cannot comprise physical objects.

Further upon inspection of the Applicant Specifications Page 10-12 the Examiner concludes said '*package metadata*' are nothing more than non-functional descriptive material. The Examiner notes that while the claim language indicates how the metadata is to be used, the metadata itself does not cause any functional or operational changes on the computer device.



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When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory.

Nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture, or composition of matter and should be rejected under 35 U.S.C. 101. Certain types of descriptive material, such as music, literature, art, photographs, and mere arrangements or compilations of facts or data, without any functional interrelationship is not a process, machine, manufacture, or composition of matter.

Nonfunctional descriptive material may be claimed in combination with other functional descriptive multi-media material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. 101.

***Claim Rejections - 35 USC § 103***

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32-43,49-61,67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamkin (US Publication 2004/0220926) further in view of Benitez (US Patent 7185049).

Lamkin disclosed (re. Claim 32) (new) a contents service providing system, the system comprising:

an analyzing unit for analyzing conditions of a usage environment of a user terminal based on package metadata and determining contents matched with the conditions; (Lamkin-Paragraph 165-Paragraph 167)

and

a providing unit for providing the determined contents to the user terminal, (Lamkin-Paragraph 155-Paragraph 167, '*collection of content*') )

wherein the targeting condition metadata includes component metadata for describing attributes of the contents, relation metadata for describing temporal/spatial relation of the contents, (Lamkin-Paragraph 376) and targeting condition metadata for describing the conditions, wherein the targeting condition metadata (Lamkin-Paragraph 31, receive search parameter for collecting desired content, Paragraph 164, search criteria provided

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by the user for acquiring content) and is capable of targeting the contents to the user terminal and the relation metadata enables to consume (Lamkin-Paragraph 273, *SMIL Timing provides attributes that can be used to specify an elements timing behavior*) a variety of contents with the temporal/spatial relation in the user terminal. (Lamkin-Paragraph 116, *presentation layout engine determines how and where on the presentation device the content will be displayed to the user*)

Lamkin disclosed a content manager to setup a graceful degradation of the presentation according the user input conditions. The collection of content 1150 also includes collection metadata. The collection metadata can include information about when along the timeline each of the entities will be displayed in relation to the other entities.

While Lamkin substantially disclosed the claimed invention Lamkin did not disclose (re. Claims 32) wherein the metadata includes relation metadata for describing temporal/spatial relation of the content. Lamkin did not disclose (re. Claims 41,59 ) wherein the temporal relation information includes MPEG-7 MDS TemporalRelation CS information; (re. Claim 42,60) wherein the spatial relation information includes MPEG-7 MDS BaseRelation CS information; (re. Claim 43,61) wherein the spatial relation information includes MPEG-7 MDS SpatialRelation CS information.

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Benitez disclosed (re. Claims 32) wherein the metadata includes relation metadata for describing temporal/spatial relation of the content. (Benitez-Column 12 Lines 1-25)

Benitez disclosee (re. Claims 41,59 ) wherein the temporal relation information includes MPEG-7 MDS TemporalRelation CS information; (Benitez-Column 12 Lines 1-25) (re. Claim 42,60) wherein the spatial relation information includes MPEG-7 MDS BaseRelation CS information; (Benitez-Column 12 Lines 1-25) (re. Claim 43,61) wherein the spatial relation information includes MPEG-7 MDS SpatialRelation CS information. (Benitez-Column 12 Lines 1-25)

Lamkin and Benitez are analogous art because they present concepts and practices regarding the use of metadata to filter and render the multimedia content according to user preferences. At the time of the invention it would have been obvious to combine Benitez into Lamkin in order to enable flexible description schemes for describing multimedia data. (Benitez-Column 4 Lines 45-55)

Claim 50 (re. package metadata) is rejected on the same basis as Claim 32.

Lamkin-Benitez disclosed (re. Claim 33,51) wherein the component metadata include: component description metadata for describing general particulars of a

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component; (Lamkin-Paragraph 383-Paragraph 385) image component metadata for describing image attributes of an image component; (Lamkin-Paragraph 383-Paragraph 385) video component metadata for describing video attributes of a video component; audio component metadata for describing audio attributes of an audio component; (Lamkin-Paragraph 383-Paragraph 385) and application program component metadata for describing application program attributes of an application program component. (Lamkin-Paragraph 178-184, Paragraph 383-Paragraph 385)

The motivation to combine described in Claim 32 applies to Claim 33,51.

Lamkin-Benitez disclosed (re. Claim 34,52) wherein the image attributes include a file size, a coding format, and a vertical/horizontal screen size. (Lamkin-Paragraph 137, Paragraph 163, '*screen size*')

The motivation to combine described in Claim 32 applies to Claim 34,52.

Lamkin-Benitez disclosed (re. Claim 35,53) wherein the video attributes include coding format, and a vertical/horizontal screen size. (Lamkin-Paragraph 137, Paragraph 163, '*screen size*')

The motivation to combine described in Claim 32 applies to Claim 35,53

Lamkin-Benitez disclosed (re. Claim 36,54) wherein the audio attributes include a file size, a coding format, and channel information. (Lamkin-Paragraph 137, Paragraph 163)

The motivation to combine described in Claim 32 applies to Claim 36,54.

Lamkin-Benitez disclosed (re. Claim 37,55) component metadata for describing general information on the components and information for each type of components (Lamkin-Paragraph 194, Paragraph 324-Paragraph 328) including file size (Lamkin-Paragraph 352, *'size of the file'*)

The motivation to combine described in Claim 32 applies to Claim 37,55.

Lamkin-Benitez disclosed (re. Claim 38,56) wherein the component metadata includes contents description metadata having a title, descriptive information (synopsis), and keywords of the contents. (Lamkin-Paragraph 194, Paragraph 324-Paragraph 328, Paragraph 227, *'keywords and description'*)

The motivation to combine described in Claim 32 applies to Claim 38,56.

Lamkin-Benitez disclosed (re. Claim 39,57) wherein the component metadata includes application program attributes metadata having application program classification information of an application program. (Lamkin-Paragraph 194, Paragraph 324-Paragraph 328, *'ratings classification'*)

The motivation to combine described in Claim 32 applies to Claim 39,57.

Lamkin-Benitez disclosed (re. Claim 40,58) wherein the relation metadata include: interaction relation information for describing relative importance between the components; (Lamkin-Paragraph 376) temporal relation information for describing a temporal sequence of component consumption; (Lamkin-Paragraph 376) and spatial relation information for describing relative locations of the components on presentation based on a user interface. (Lamkin-Paragraph 376)

The motivation to combine described in Claim 32 applies to Claim 40,58.

Lamkin-Benitez disclosed (re. Claims 41,59 ) wherein the temporal relation information includes MPEG-7 MDS TemporalRelation CS information; (Benitez-Column 12 Lines 1-25) (re. Claim 42,60) wherein the spatial relation information includes MPEG-7 MDS BaseRelation CS information; (Benitez-Column 12 Lines 1-25) (re.

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Claim 43,61) wherein the spatial relation information includes MPEG-7 MDS

SpatialRelation CS information. (Benitez-Column 12 Lines 1-25)

The motivation to combine described in Claim 32 applies to Claim 41,42,43.

Lamkin-Benitez disclosed (re. Claims 49,67) wherein the package metadata includes reference information including identification information for describing locations of the contents.(Lamkin-Paragraph 384)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



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Claims 44-48, 62-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamkin (US Publication 2004/0220926) further in view of Benitez (US Patent 7185049) further in view of Errico (US Patent 7055168).

Lamkin-Benitez disclosed (re. Claim 44,62) wherein the targeting condition metadata include: user condition information for describing user environment characteristics; (Lamkin-Paragraph 165-Paragraph 167)

terminal condition information for describing terminal environment characteristics; (Lamkin-Paragraph 165-Paragraph 167)

and natural environment information for describing natural environment characteristics such as the location of a terminal. (Lamkin-Paragraph 113, Paragraph 138)

While Lamkin-Benitez substantially disclosed the claimed invention Lamkin-Benitez did not disclose (re. 44 ,62) network condition information for describing network environment characteristics connected with the terminal.

Errico disclosed (re. 44,62 ) wherein the network environment characteristics include a bandwidth of a network connected with the terminal, a delay characteristic and an error characteristic. (Errico-Column 37 Lines 1-15)

Lamkin, Benitez and Errico are analogous art because they present concepts and practices regarding the use of metadata to filter and render the multimedia content according to user preferences. At the time of the invention it would have been obvious to combine Errico into Lamkin in order to enable users to maintain/specify multiple separate user preference descriptions corresponding to, for example, different locations (e.g., at home, at the office, away from home, stationary versus traveling in a vehicle), different situations.

Lamkin-Benitez-Errico disclosed (re. Claim 45,63) wherein the user environment characteristics include a user preference, (Lamkin-Paragraph 20) user history, (Lamkin-Paragraph 325) surge information and visual/auditory difficulty information. (Lamkin-Paragraph 165-Paragraph 167)

Lamkin-Benitez-Errico disclosed (re. Claim 46,64) wherein the terminal environment characteristics include codec capability, device attributes, and input/output characteristic information. (Lamkin-Paragraph 165-Paragraph 167)

Lamkin-Benitez-Errico disclosed (re. Claim 47,65) wherein the network condition information includes network capability information. (Errico-Column 37 Lines 1-15)

Lamkin-Benitez-Errico disclosed (re. Claim 48,66) wherein the natural environment characteristics include characteristics of audio/visual aspects, location information, and usage time of a digital item. (Lamkin-Paragraph 113, Paragraph 138)

### ***Conclusion***

**Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure

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relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to the enclosed PTO-892 form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREG BENGZON whose telephone number is (571)272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571)272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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